NOTES ON THE WINTER COLEOPTERA OF WESTERN AND SOUTHERN FLORIDA, WITH DESCRIPTIONS OF NEW SPECIES.

BY W. S. BLATCHLEY, Indianapolis, Ind.

During the winter of 1918–1919 I collected from December 1 to February 11, and from March 6 to March 30, about Dunedin on the west coast of Florida. In the interim, February 12 to March 5, I made a trip to Cape Sable and Key West, stopping four days on the way at Lakeland. A number of interesting and a few undescribed species of Coleoptera were taken during the season, and of these, except the Rhynchophora which will be treated elsewhere, the present article deals.

Cape Sable, the extreme southern point of the mainland of Florida, is an interesting place, but as yet a difficult one to reach. I went with a party of land-seekers and tourists from Lakeland to Homestead, via New Smyrna, Palm Beach and Miami by automobile, thus passing clear across the State from west to east and 250 miles down the east coast, a route necessary to avoid bad roads. From Homestead to Long Key, an island 30 miles southeast of Cape Sable, we took a train on the East Coast Railway. At Long Key we were met by a small boat of the Cape Sable Land Co., which makes a weekly trip for mail and supplies from the "Club House" of the Land Co. This club house is located about three miles from the point of the cape proper. In fact, there are three capes or points, the eastern and middle ones, about six miles apart, being occupied to within 50 yards of the water's edge by cocoanut groves which contain about 40,000 bearing trees.

The country about Cape Sable differs much from other parts of Florida, being for the most part a low, flat region devoid of pine, saw palmetto and sand the three dominant features of the usual south Florida landscape. The soil, or rather the surface, is composed of comminuted limestone and, except along the brackish inlets and sloughs, supports only a prairie-like vegetation of weeds and grasses. The houses, few and widely scattered, are raised high above the ground to avoid the tides which, during hurricanes or violent storms, often cover the country for miles. There is no fresh water, rain water collected in large square surface concrete cisterns furnishing the supply for the settlers. Along the inlets and in the lower depressions are the so-called hammocks, composed of a dense growth of subtropical shrubs and trees among which Spanish bayonet, tall cacti and other thorn-bearing vegetation so abound that collecting has to be done mostly along the margins. A single phrase from my notebook, viz., "a few fair things and a million mosquitoes," was the average record of each day's collecting about the Cape at that season. Late in the afternoon or on sultry days a "million" would be a very low estimate of the mosquito population. Several times they drove me out of the hammocks onto the open prairie where there was a little air stirring but poor collecting.

The net result of my week's enforced stay was, on the whole, disappointing. Of Coleoptera only Rhynchophora were found in any numbers, but of them a

^{1.} See Can. Ent., XLIX, 1917, 137.

number were rare and interesting. I was glad when Thursday morn rolled round again and a start could be made for Key West. A new automobile road is being constructed from Homestead to Cape Sable, so that in a year or two the Cape can be more easily reached.

The island of Key West, where I spent five days, has been visited by many collectors and its insect fauna is well known. The conditions for collecting are, however, poor and growing worse. This is due to the lack of vegetation and fresh water—only a few stunted shrubs and trees remaining on the island. Here, as at Cape Sable, some of my most interesting captures were among the Rhynchophora. However, a Dytiscid, Copelatus debilis Sharp, new to this country, was taken, and also a number of the species mentioned on the pages which follow. From Key West I returned to Tampa by steamer, and from there to Dunedin is a distance of only 27 miles.

Pasimachus strenuus Lec. On March 11 I found one of these large Carabids crawling backwards across a sandy roadway in Dunedin and dragging with him a specimen of the bulky Scarabæid, Deltochilum gibbosum Fab. The victim was still alive and had evidently put up a strong fight for existence, as both his fore legs and one of the middle ones were wanting. D. gibbosum appears to be a scarce species in Florida, having been taken by me but once before, when a half dozen were found in a putrid, extremely fetid mass of fungi in Skinner's Hammock near Dunedin.

Dicælus elongatus Dej. This species, frequent throughout Indiana, is seldom found in Florida. Two specimens were taken February 13 from beneath logs in low woods on the border of Lake Parker, northeast of Lakeland. Heretofore known from the State only by specimens taken by Schwarz at Enterprise, St. Augustine and Crescent City.

Lebia fuscata Dej. Two specimens were beaten from dead leaves of cabbage palmetto near Dunedin, one Jan. 29, the other March 19. It has been recorded from Jacksonville and Belleair, and is said to occur from Canada to Florida and Missouri.

Selenophorus fatuus Lec. Quite common beneath dead leaves near the crematory on Key West. With it were taken Copelatus debilis Sharp and Casnonia pennsylvanica L., the latter with the black spots of elytra very large and confluent.

Neoharmonia venusta fattigi, var. nov.

Differs from typical venusta in having the black markings of each elytron reduced to the two median spots, one round and submarginal, the other subsutural with a narrow prong directed forward. It is thus intermediate between the typical form and var. dissimila,3 the latter having these median spots wholly wanting. Examples of all three forms were sent to me by Prof. P. W. Fattig, of Gainesville, who took them at Pahokee on April 25.

Psyllobora nana Muls. A single specimen was taken March 2 while · sweeping near the Old Fort on Key West. It is a Cuban and Jamaican species,

See Bull. Amer. Mus. Nat. Hist., XLI, 1919, 312.
 Can. Ent., XLVI, 1914, 66.

and has been taken by Berger on the Dry Tortugas and the Florida Keys. P. parvinota Casey was taken in numbers both at Cape Sable and Key West.

Hyperaspis nigrosuturalis Blatch. Several additional specimens of this handsome Coccinellid, which was described from a unique taken at Lakeland. were collected near Dunedin in February by beating large bunches of Spanish mess in which they were hibernating.

Scymnillus eleutheræ Casey. Three specimens of this minute Coccinellid were beaten from the foliage of the Saffron Plum, Bumelia angustifolia Nutt., along the edges of a hammock at Cape Sable. It was identified for me by Col. Casey, who described it from the Bahama Islands, this being its first record for the United States.

Scymnus dichrous Muls. A single specimen taken March 3 by beating at Key West. This species has not before been recorded from Florida, nor definitely from the United States. Mulsant's brief characterization and notes were as follows: "I have seen in the Chevrelat collection, under the name Scymnus dichrous, a specimen having the posterior fifth of the Elytra reddish white or reddish yellow, except that the suture throughout is widely bordered with black. Perhaps this specimen which seems to constitute a distinct species. may however be attached to Scymnus ochroderus." He gives no locality for dichrous ochroderus was from St. Bartholomew, West Indies.

Scymnus bivulnerus Horn. This species was taken both at Cape Sable and Key West. It was described in part from the latter place.

Mychocerus depressus Lec. Two specimens of this, the smallest of our Colydiidæ, were taken Dec. 11 from beneath bark of dead water oak near Dunedin. Horn gives⁶ its range as "District of Columbia to South Carolina and very rare." It has not before been recorded from Florida, though mentioned in the Schwarz Mss, list from Tallahassee.

Apsectus hispidus Melsh. I can find no Florida record of this little bristly Dermestid. A single specimen was taken at Dunedin, March 19, from bottled, dead-leaf debris which was kept on account of its containing Hormops abducens⁷ Lec. The Dermestid is said by Leconte⁸ to occur in the middle and southern states on leaves.

Hister adonis, sp. nov.

Elongate-oval, moderately convex. Black, shining. Thorax with two marginal strice, the inner one almost entire, the outer but little shorter; disk smooth. Elytra with one sub-humeral stria reaching the apex and a very fine, oblique humeral. Dorsal striæ five, entire, the fifth arching and joining the sutural, the striæ well impressed, evidently but feebly punctate; epipleuræ unistriate. Propygidium and pygidium both finely and rather sparsely punctate. Mesosternum truncate. Front tibiæ with four rather coarse teeth, the apical Length 5.8 mm. one entire.

Can. Ent., L, 1918, 420.

Can. Bitt., E., 1918, 120.
 Jour. N.Y. Ent. Soc., VII, 1899, 115.
 Proc. Amer. Phil. Soc., XVII, 1878, 592.
 See Journ. N.Y. Ent. Soc., XXVI, 1918, 158.
 Proc. Acad. Nat. Sci. Phil., VIII, 1854, 113.

Dunedin, Florida, Dec. 13. One specimen taken from beneath a board near the margin of a pond. A member of Horn's Americanus Group, allied to sedecimstriatus but larger, more oblong, with two nearly entire thoracic marginal striæ, but one sub-humeral and with dorsal striæ less impressed, less distinctly punctate. Not in the Leconte or Horn collections and not known to Col. Casev.

Saprinus obsidianus Casey. Three specimens of this highly-polished Histerid have been taken at Dunedin, Dec. 21-March 21, one in a bucket of water, the others at carrion traps. It was described from Mobile, Ala., and has not before been recorded from Florida.

Carpophilus rickseckeri Fall. Two specimens were taken by sweeping along the margins of an orange grove near Dunedin, March 17. It was originally described from specimens taken in decaying cactus at San Diego, Cal., and Mr. Fall informs me that he has since seen specimens from Florida. 10

Quadrifrons castanea Blatch. A second specimen of this very distinct Nitidulid was taken March 7. It was swept from low huckleberry bushes growing within 100 yards of the bay front one mile north of Dunedin. Both genus and species were founded (Can. Ent., 1916, 92) on a unique taken at Dunedin.

Ora texana Champ. Two specimens of this Dascyllid were taken at Dunedin Feb. 6 by beating a bunch of Spanish moss in which they were hibernating. It is the Scirtes troberti of Horn, 11 nec. Guer. and has been recorded before only from Louisiana and Texas, though known to Schwarz from Crescent City and Cape Malabar, Florida.

Melanotus parallelus, sp. nov.

Elongate and slender for the genus. Dark chestnut brown; antennæ, legs and last two ventral segments, pale reddish-brown; basal margin of elytra brighter reddish-brown. Antennæ slender, slightly longer than head and thorax, second joint subglobose, less than half the length of third, the latter nearly as long as, but much more slender than fourth. Clypeus flat, its disk coarsely and densely punctured, front margin very broadly rounded. Thorax one-half longer than wide, its sides straight and parallel from the tips of the long, acute hind angles almost to apex; disk rather finely and sparse, punctate, the punctures at middle separated by twice or more their own diameters, on sides distinctly closer, each puncture bearing a long, grayish-white prostrate hair. Elytra at base not wider than thorax, thence faintly but evidently and even'y tapering to apex; disc with rows of close-set rather coarse punctures; intervals slightly wider than the rows of punctures, each with two rows of very fine alternating punctures, each of which bears a long, prostrate whitish hair. Abdomen finely and sparsely punctate, the last segment with more numerous and coarser aciculate punctures. Length 8.7–9.5 mm.

^{9.} Trans. Amer. Ent. Soc., XXXVI, 1910, 124.
10. This is probably the Carpophilus humeralis Murry, mentioned by Leng (Journ. N.Y. Entom. Soc., XXVI, 1918, 205) as having been introduced at Oneca, Fla, If so Fall's name is a synonym.
11. Trans. Amer. Ent. Soc., VIII, 102, pl. 1, fig. 15.

This is apparently a common winter *Melanotus* in Florida, having been taken by me at Ormond, Sanford and Dunedin, Feb. 27–Apr. 15. About Dunedin it occurs especially in early spring on the tall scurfy Ericad, *Xolisma ferruginea* Walt. which grows in clumps in very dry, sandy spots. It is especially notable for the long, parallel-sided thorax and peculiar punctuation of the last yentral.

Melanotus perplexus, sp. nov.

Size medium, form moderately slender. Occiput, apical third of thorax, elytral suture and under surface dark chestnut-brown; basal portion of thorax and elytra except suture, reddish-brown; antennæ and legs pale brown. Antennæ stout, strongly serrate, reaching basal third of abdomen, joints one and two very short, subequal, subglobose, the two united less than half the length of fourth, the latter slightly longer than fifth. Clypeus densely and coarsely punctate, feebly concave, its front margin narrowly rounded. slightly longer than wide, the centre of its disk notably convex, widest at middle, the sides evidently but not strongly curved; hind angles short, feebly divergent; disk finely, evenly and rather closely punctate; basal third strongly declivent, the concavity between base of thorax and that of elytra very deep and long. Elytra at base as wide as middle of thorax, thence very feebly narrowing to the rather bluntly rounded apex; striæ distinctly impressed, their punctures round, close-set; intervals as wide as the striæ, each with two irregular rows of minute punctures each bearing a very fine, short, white prostrate hair. Abdomen finely and rather closely punctate, the last two segments both densely punctate and pubescent. Length of body 8-8.2 mm.

Dunedin, Fla., June 10, July 5, two specimens taken at light. The colour and short, convex thorax with large, deep basal concavity are the distinguishing features of this species.

Taphrocerus puncticollis Schwarz. I find that I have heretofore erroneously identified this species. It is our largest member of the genus, 5 to 6 mm. in length, bluish-black, the elytra without, or with very faint, pubescent patches, their surface more or less rugose and with strial punctures somewhat confused. A half dozen specimens were taken near Lakeland, Feb. 16, from between the leaf-sheaths and clumps of a saw-grass growing in clumps along the margin of a lake.

Trichodes apivorus trifasciatus Sturm. A specimen of this large and handsome Clerid, taken at Gainesville May 23, is at hand. It was sent me by P. W. Fattig. The species is listed by Schwarz as "very rare" in Florida.

Hydnocera verticalis Say. A variety of this well-known northern form, having the thorax with only narrow lateral and median stripes piecous: head and elytra wholly pale or the former with a faint fuscous blotch on occiput, occurs in Florida. A specimen was beaten from Spanish moss at Lakeland, and another is at hand from Lake City—The species has not before been noted definitely from Florida.

(To be continued.)